PATENT COOPERATION TREATY **PCT**

29 MRS. 2004

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

2 L DEC 2004

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|--|--|------------------------------|--|------------------------|---------------------------------------|-----|
| Applicant's or agent's file reference | | agent's file reference | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | | | |
| ŀ | | application No. | International filing date | (day/month/year) | Priority date (day/month/yea | ar) |
| PCT/DK 03/00407 19.06.2003 | | | 19.06.2003 | | 21.06.2002 | |
| l | International Patent Classification (IPC) or both national classification and IPC D21J1/04, D21J1/04 | | | | | |
| 02131 | 1/04, | D21J1/04 | | | | |
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| Applica | | | | | | |
| META | MITE | A/S et al. | | | | |
| This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. | | | | | | |
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| , T | hic P | EDORT consists of a total | of C. obooto implication at | nin anumu al 4 | | |
| 2. T | nis H | EPORT consists of a total | or a sneets, including th | nis cover sneet | | , |
| | This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). | | | | | |
| т | | annexes consist of a total | | | | |
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| 3. T | his re | port contains indications r | elating to the following it | ems: | | |
| - 1 | Σ | Basis of the opinion | | | | |
| l) | | Priority | | | | |
| H | _ | | opinion with regard to n | ovelty, inventive step | and industrial applicability | |
| ١١ | | _ | tion | | • | |
| V | V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | | | applicability; | |
| V | | - | | | | |
| V | | | international application | • | | |
| V | 'III C | Certain observations | on the international appl | ication | | |
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| Date of a | cu hanis | ssion of the demand | | Data et es-relation -4 | this road | |
| Date Of S | อนมกับเร | solon of the defliatio | | Date of completion of | илѕ героп | |
| 15.01.2004 | | | 25.03.2004 | | | |
| | Name and mailing address of the international | | | Authorized Officer | · · · · · · · · · · · · · · · · · · · | |
| preliminary examining authority: | | | Telephone No. +49 89 | 2399- | 116 | |
| D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | | | | | | |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DK 03/00407

| l. | Basis | of | the | re | por | t |
|----|-------|----|-----|----|-----|---|
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 With regard to the elements of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):

| | De | Description, Pages | | | | |
|---|---|--|---|--|--|--|
| | 1-15 | | as originally filed | | | |
| | Cla | ims, Numbers | | | | |
| | 1-44 | | as originally filed | | | |
| | Drawings, Sheets | | | | | |
| | 1/3 | -3/3 | as originally filed | | | |
| 2. | 2. With regard to the language , all the elements marked above were available or furnished to this Authority in language in which the international application was filed, unless otherwise indicated under this item. | | | | | |
| | These elements were available or furnished to this Authority in the following language: , which is: | | | | | |
| | | the language of a tra | anslation furnished for the purposes of the international search (under Rule 23.1(b)). | | | |
| | | the language of pub | lication of the international application (under Rule 48.3(b)). | | | |
| | | the language of a translation S5.2 and/or 55.2 | anslation furnished for the purposes of international preliminary examination (under 3). | | | |
| 3. | Witl inte | h regard to any nucl e rnational preliminary | ectide and/or amino acid sequence disclosed in the international application, the examination was carried out on the basis of the sequence listing: | | | |
| | | contained in the inte | emational application in written form. | | | |
| | | filed together with th | e international application in computer readable form. | | | |
| | ☐ furnished subsequently to this Authority in written form. | | | | | |
| furnished subsequently to this Authority in computer readable form. | | | ntly to this Authority in computer readable form. | | | |
| | | The statement that t in the international a | he subsequently furnished written sequence listing does not go beyond the disclosure application as filed has been furnished. | | | |
| | | The statement that t listing has been furn | he information recorded in computer readable form is identical to the written sequence ished. | | | |
| 4. | The | amendments have r | esulted in the cancellation of: | | | |
| | | the description, | pages: | | | |
| | | the claims, | Nos.: | | | |
| | | the drawings, | sheets: | | | |
| | | | | | | |

INTERNATIONAL PRELIMINARY **EXAMINATION REPORT**

International application No.

PCT/DK 03/00407

| 5. 🗆 | This report has been established as if (some of) the amendments had not been made, since they have |
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| | been considered to go beyond the disclosure as filed (Rule 70.2(c)). |

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

- 6. Additional observations, if necessary:
- V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- 1. Statement

Novelty (N)

Yes: Claims

1-44

No: Claims

Inventive step (IS)

Yes: Claims

1-44

Claims No:

Industrial applicability (IA)

Yes: Claims

- 1-44

Claims No:

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: GB-A-1 405 587 D2: WO-A-9419539

2. The closest prior art to the subject-matter of present claim 1 is known from document D1. This document discloses (cf. in particular page 5, line 114-page 6, line 20; page 6, lines 55-109; figures):

"An installation for manufacturing of shaped elements from fibrous waste material, said installation comprising means for mixing a portion if fibrous waste material with at least water, at least one conveyor belt for transporting said mass of waste material and water, a first press for pressing and draining the mass for an amount of surplus water, and means for cutting said pressed mass into elements of predetermined lengths."

The subject-matter of present claim 1 differs from this disclosure in that a second press adapted to co-operate with said conveyor belt for simultaneously pressing and vibrating the mass is provided.

Thereby, the dewatering process of the mass can be improved.

Document D1 merely defines the features mentioned above.

Document D2 (cf. in particular page 11, lines 10-34; page 14, line 32-page 17, line 6; figures) defines a similar installation, wherein the mass of waste material and water is also treated on a first press for pressing and draining the mass. Thereafter, the mass is transferred from the conveyor to be cut and dried and to be treated in two further press stations. However, no vibrating action is disclosed.

Therefore, no indications for the subject-matter of present claim 1 can be found in documents D1 and D2.

The subject-matter of claim 1 is therefore considered as being novel and involving

EXAMINATION REPORT - SEPARATE SHEET

an inventive step with respect to the cited prior art (Article 33(2) and (3) PCT).

The industrial applicability of the installation according to claims 1 is obvious (Article 33(4) PCT).

- Claims 2-19 define additional features of the invention according to claim 1 and as 3. such also meet the requirements of the PCT with respect to novelty, inventive step and industrial applicability with respect to the cited prior art.
- Present claim 20 defines an apparatus for pressing a mass of fibrous waste 4. material.

The closest prior art to this subject-matter is also known from document D1 (cf. in particular page 5, line 130-page 6, line 12), disclosing an upper and lower opposing surface, at least a part of one of the surfaces being perforated, so as to drain the mass when the mass is pressed between the surfaces.

The subject-matter of present claim 20 differs from this disclosure in that at least one of the surfaces is adapted to vibrate in relation to the mass.

Document D1 mentions passing the layer of slurry carried by a vibrating conveyor through a dewatering device formed between top and bottom belts, like it is shown in figure 3 or 4 of document D1. However, it is not disclosed suggested that one of these belts is formed by the vibrating conveyor itself.

The subject-matter of claim 20 is therefore also considered as being novel and involving an inventive step with respect to the cited prior art (Article 33(2) and (3) PCT).

The industrial applicability of the apparatus according to claims 20 is obvious (Article 33(4) PCT).

- Claims 21-24 define additional features of the invention according to claim 1 and 5. as such also meet the requirements of the PCT with respect to novelty, inventive step and industrial applicability with respect to the cited prior art.
- 6. Present claim 25 defines a method corresponding to the use of the installation claimed in present claim 1.

For the reasons given above, the subject-matter of this claim is therefore also considered as being novel and involving an inventive step with respect to the cited prior art (Article 33(2) and (3) PCT).

The industrial applicability of the method according to claims 20 is obvious (Article 33(4) PCT).

- 7. Claims 26-44 define additional features of the method according to claim 25 and as such also meet the requirements of the PCT with respect to novelty, inventive step and industrial applicability with respect to the cited prior art.
- 8. The following points are also to be mentioned:
 - a. Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from document D1 being placed in the preamble (6.3(b)(i) PCT) and with the remaining features being included in the characterizing part (6.3(b)(ii) PCT).
 - b. The features of the claims should have been provided with reference signs placed in parentheses to increase the intelligibility of the claims (Rule 6.2(b) PCT).
 - c. Certain published documents (Rule 70.10)

| Application No | Publication date (day/month/year) | Filing date | Priority date (valid claim, |
|----------------|-----------------------------------|------------------|-----------------------------|
| Patent No | | (day/month/year) | (day/month/year) |
| WO-A-02096536 | 05.12.2002 | 31.05.2002 | 31.05.2001 |

This document is considered highly relevant with respect to the question of novelty of the subject-matter of present claims 20-24.